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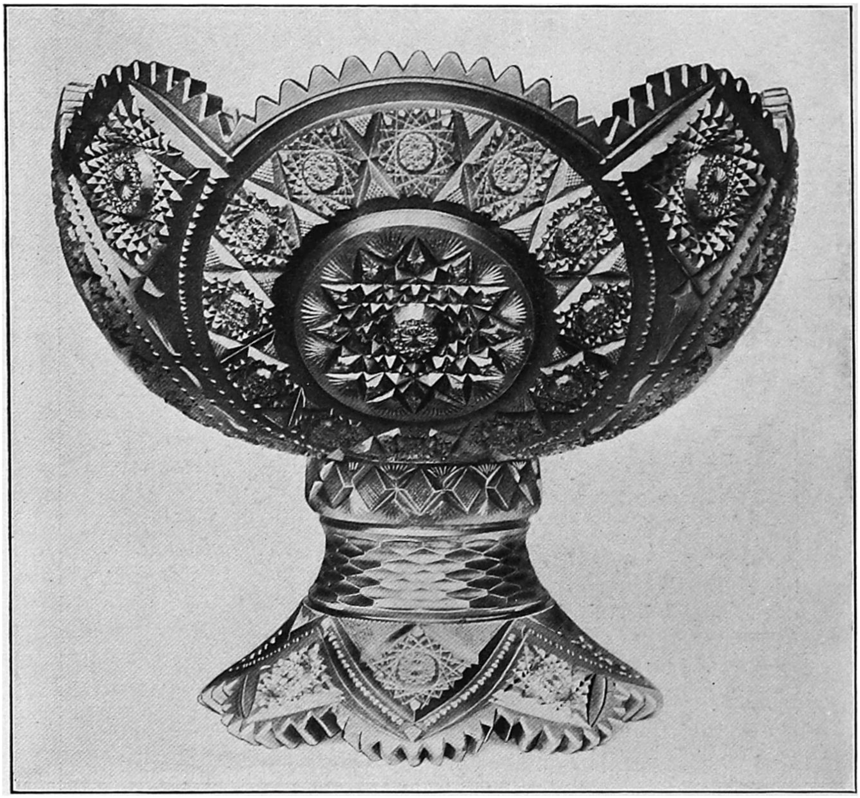


AMERICAN FACETED CUTTING

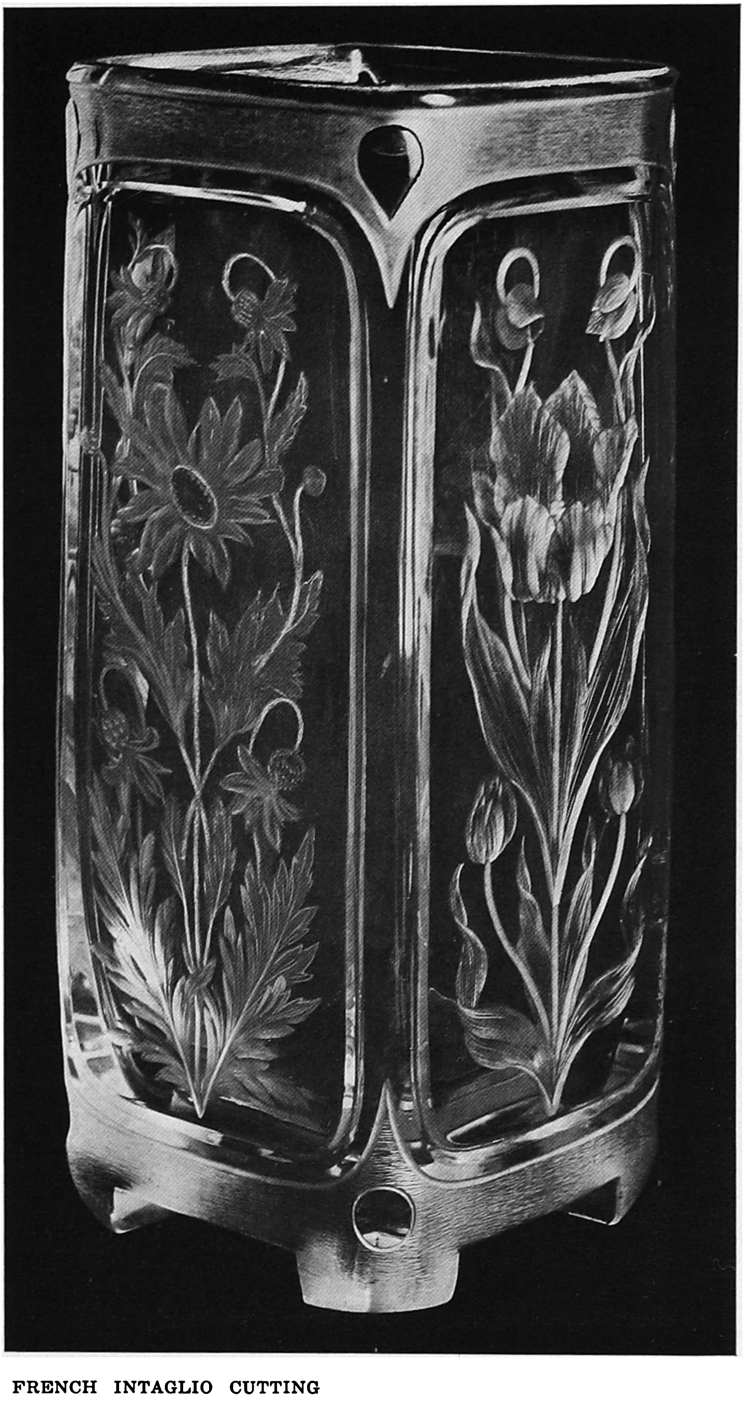
THE STORY OF CUT AND ENGRAVED GLASS.

WHAT IT IS AND HOW IT MAY BE JUDGED

We cannot always rely on information received in the auction shops of the American summer resort, but occasionally the smiling auctioneer will give voice to some truth, even though it may not apply to the article which he desires his eager audience to bid upon. The writer happened to step into one of these shops not long ago just as a rather inferior bit of cut glass was "put up" with the remark, "America has never given to the world much in the way of art, but in cut glass she leads the world." Here was a truth, for America does indeed lead the world in glass-cutting, and in glass-making, too, for we must discriminate and the latter must be perfect before the former can be a success.

In the situation there was also a raison d'etre for this article, and upon the text of the auctioneer's remark and its application these words are written. Of course America would not have won her laurels had

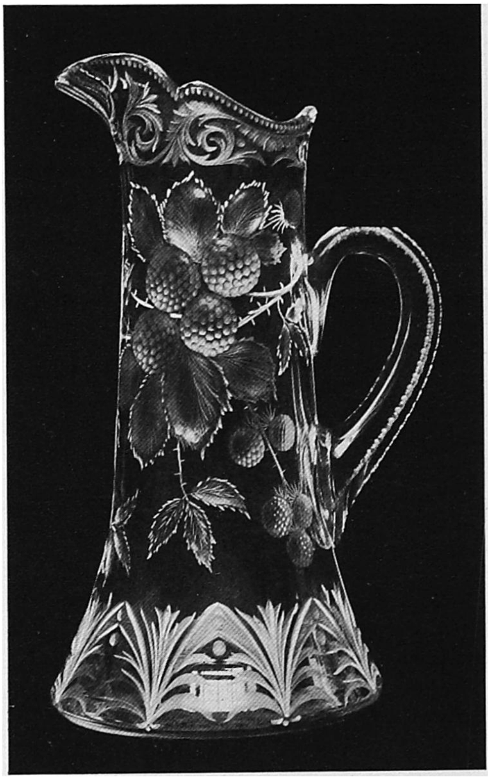
Note—Illustrations by courtesy of Spaulding & Co.



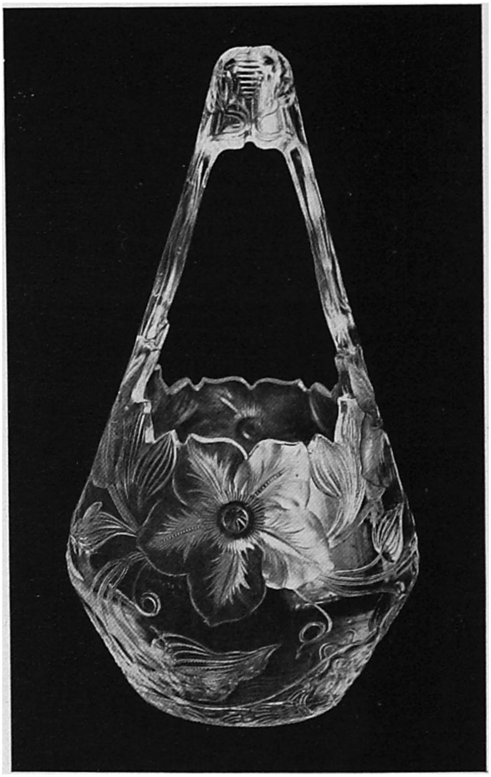
FRENCH INTAGLIO CUTTING

she never produced a finer example of glass-cutting than that which our auctioneer offered.

The piece held before our gaze was American, and the thought came —if America produces the best cut-glass, there is also produced in this country much that is inferior and some that is positively bad. How much does the average purchaser know of glassware, and how may one distinguish the good from the inferior? The lesson is not difficult and once learned is never to be forgotten. A knowledge of what glass is will be necessary and a brief outline of its history, while not necessarily essential, will be interesting and contribute to one's enjoyment in collecting specimens of it.

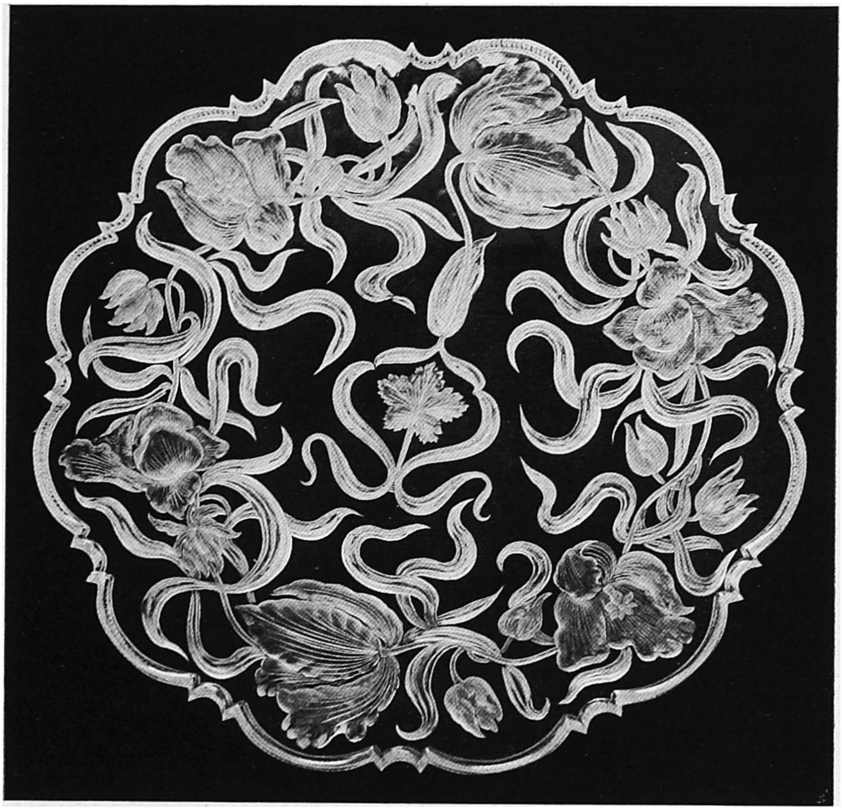


CARVED GLASS—AMERICAN



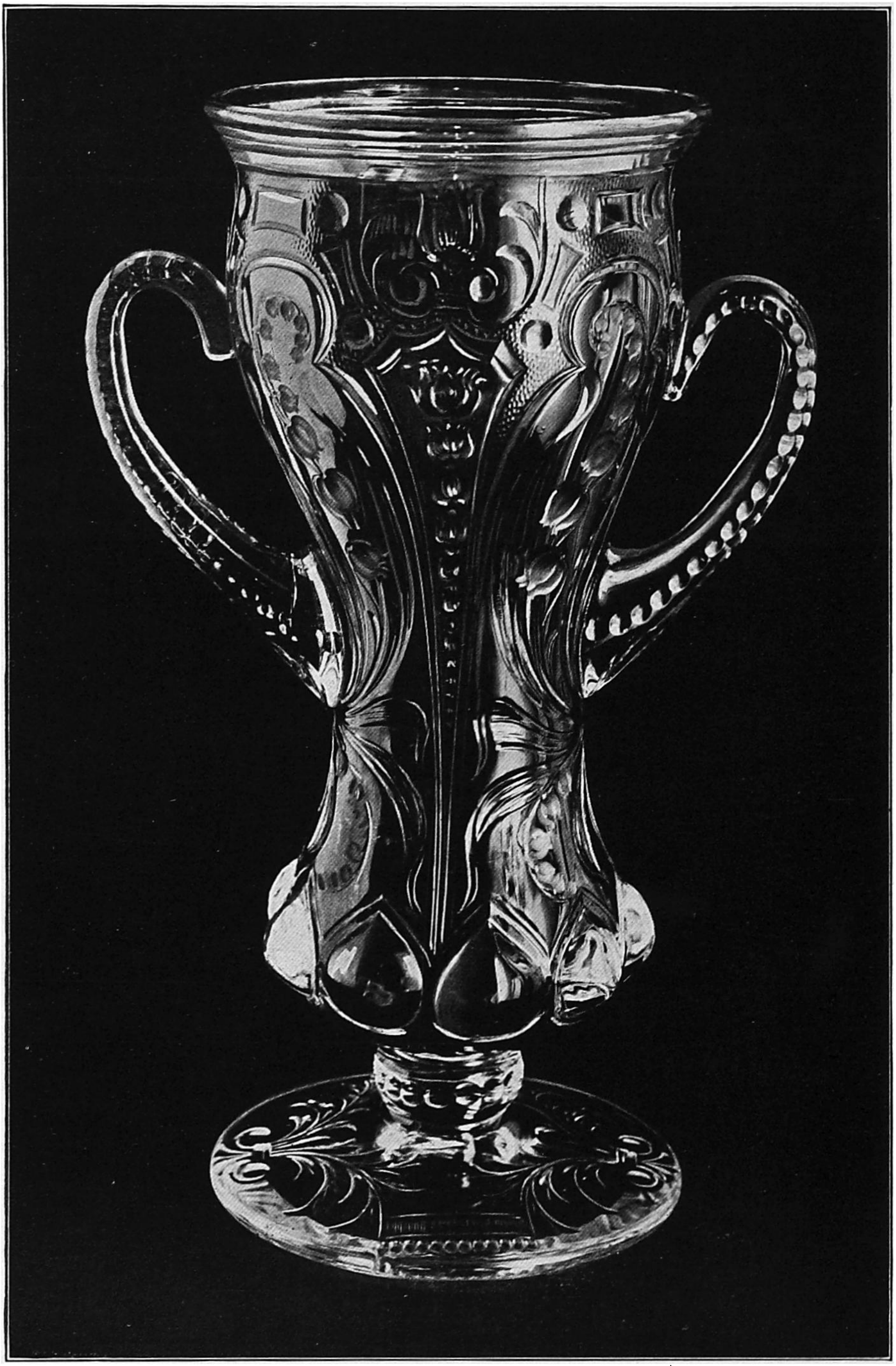
ROCK CRYSTAL CUTTING—ENGLISH

It is a far cry from the discovery of glass by the Phoenician merchants on the coast of Palestine, who, as Pliny tells us, were cooking their food in pots, which they had supported in blocks of nitre, and found glass produced by the mixture of the melted nitre and the sand of the shore, to the great glass furnaces and shops of the present day; and yet during all this time, through all the intervening ages, the manner of making and handling glass has been practically the same. On the tombs of ancient Egypt, dating many years before Christ, have been found representations of men blowing glass as it is done to-day. We are told that glass, as ordinarily understood, is a brittle, transparent compound produced by the fusion, at a very high temperature, of silica with one or more basic substances, one of which must be an alkaline metal.



ROCK CRYSTAL CUTTING—AMERICAN

This spoils the interesting story of the discovery of glass by the Phoenician merchants, for it would have been impossible for them to have generated by their camp fires the tremendously high temperature of 2,500 degrees Fahrenheit, which is required to accomplish the fusion. As a matter of fact we are ignorant of the origin of glass, but it is probably safe to attribute its discovery to the Egyptians, as the earliest examples of glass, of which there is attested record, are from Egypt, and the antiquity of the art is evidenced by the specimens in our museums from Egypt, Assyria and Phoenicia.



ENGLISH ROCK CRYSTAL

These examples of ancient glass show that the peoples of the early times were not slow in appreciating the value of glass and the uses to which it could be put, for we see vases, articles of utility and bits of ornament with sufficient evidence to prove that such articles were produced and used in abundance. In fact it has been stated that in the first centuries of the Christian era glass was used more extensively and for more purposes by the people of the Roman Empire than by ourselves to-day.

This seems a startling statement, but it is a true one, even though at that time window glass was unknown and the use of glass in optical and scientific instruments had not been seriously considered. In articles of personal adornment, for domestic purposes and for architectural decoration, glass was used much more than at present. But we cannot go into detail as we pass on in our brief historical outline; we must speak of glass generally, though it is hard not to mention some of the fascinating methods of making glass, and to call attention to the examples of such work which have been handed down to us.

It will serve our purpose to touch only upon the mountain tops of this history, and so we go on observing the deterioration of the art of glass-making, with other arts, in the decline of the Roman Empire, witnessing the introduction of colored glass plates in the making of ecclesiastical windows, and the increase of mosaic decoration in the Middle Ages, until, we come to the 13th century and find Venice reigning supreme in the world of glass. The Venetians were cunning workers in glass, but they were not glass cutters. Their work is chiefly noteworthy for elegance of form and the lightness and thinness of the articles produced. The glass, however, is dull and oftentimes tinged with yellow. The glories of the ancient Venetian glass are to-day reflected in the splendid work of Salviati, the modern master of Italian work.

The prosperity of the Venetian glass industry, which, by the way, was transferred to Murano in the early part of the 14th century, was seriously interfered with by the production of better glass in Bohemia and the invention there of new ideas, and Bohemian glass stood unrivalled until the introduction of flint glass in England.

Just when glass was first made in Brittain it is difficult to determine, but it was undoubtedly introduced by the Romans. However, English glass can lay no claim to special attention until the important invention early in the 17th century of what is known in England as "flint-glass" and in France as "crystal." This is produced by using a large proportion of oxide of lead in combination with potash, making a heavy and brilliant glass particularly suitable for cutting. Now let us follow our history a bit and acquaint ourselves with the introduction of glass-making into our own country.

Just before the invention of flint glass, there was established in the woods near Jamestown, Virginia, a small glass-house where was manufactured rough glass bottles, and beads to be used in Indian trading. Gradually shops sprang up in other colonies, but it was not until after the Revolution that glass-making became an industry of any importance in America. It is only about thirty years ago that glass was made here to equal the best flint glass of England, and, as Bohemia centuries ago, by making better glass, secured to herself almost a monopoly of the glass trade, so America in the last few years, by producing finer flint glass than any other country, has built up a marvelous industry in cut-glass.

Flint-glass, as we have suggested, may vary in quality, and as it forms the base of all cut, rock-crystal and carved glass, it is important we should understand and appreciate it. As we have seen, flint-glass is composed of sand, potash and oxide of lead, and it varies in quality according to the grade of materials used and the skill employed in combining them. The superiority of the high-grade American glass is due to the fact that we have the purest quality of sand the world has known, and with characteristic persistency, have attained the skill to mix and manipulate the metal. But we have said inferior glass is made here; the result of another American trait—commercialism and competition for cheapness. This inferior grade in the finished product combines a poor quality of glass with indifferent cutting and may be distinguished from the good glass by a careful examination of its color and the execution of the design.

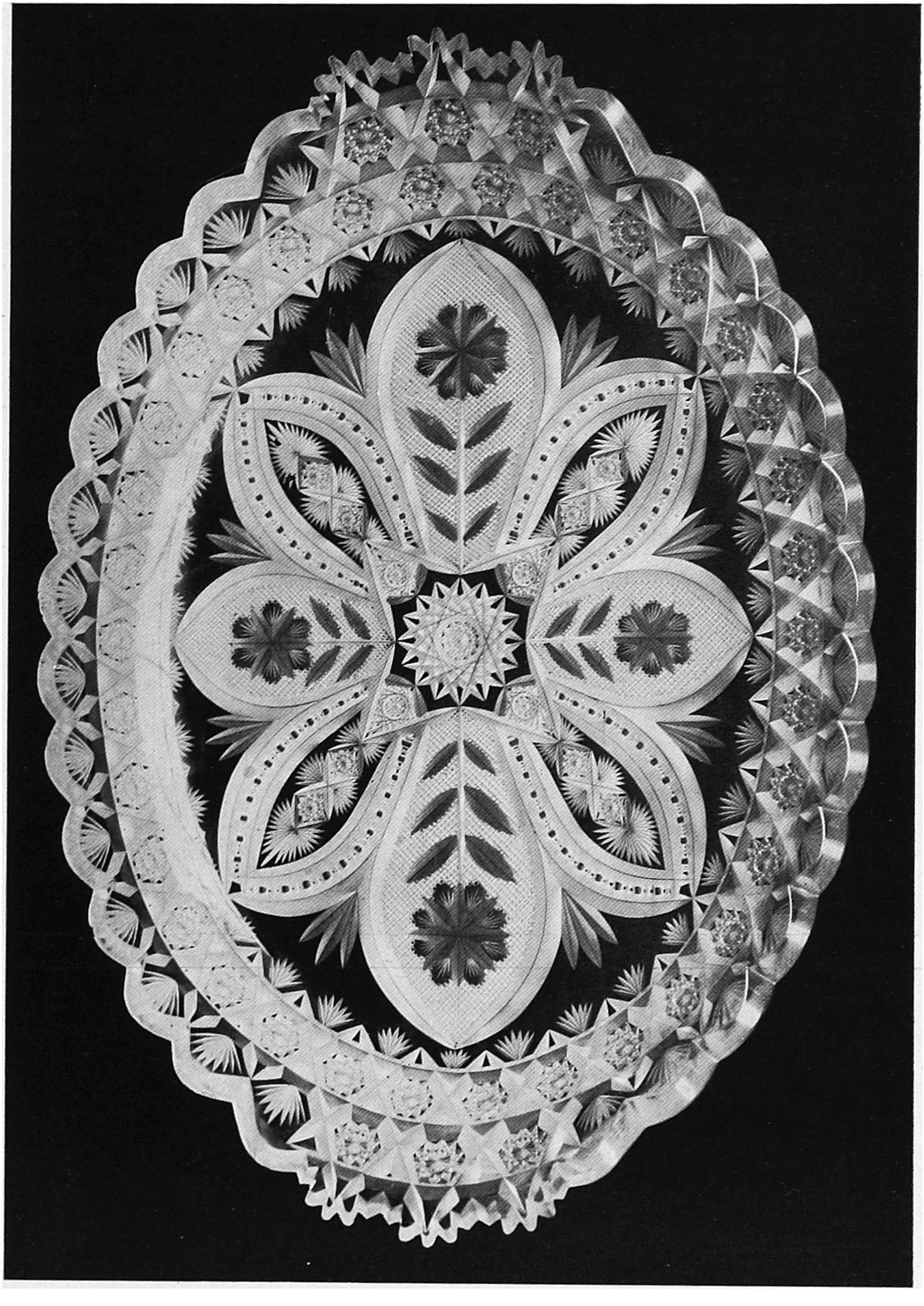
Fine glass transmits colorless light, is clear and free from bubbles and imperfections, while poor glass shows yellow or greenish tints, is often dark, frequently shows irregularities and has a smoky appearance when held before the light. Obviously the better glass is more carefully designed and the cutting more skillfully executed—points that are easily discovered by comparison.

There is one other point to distinguish good from inferior glass—the manner of finish; but, before we can finish an article, we must make it; and so, while we cannot describe, for lack of space, the process of glass-cutting in detail, we will outline the method, define cut, engraved and carved glass, tell how the finishing varies, and our story is soon done.

We must consider then that we have before us a "blank," i. e., an article of glass which has been blown and manipulated from the still warm metal into its final shape, and has passed through the annealing oven to reduce its brittleness and is now ready to be decorated.

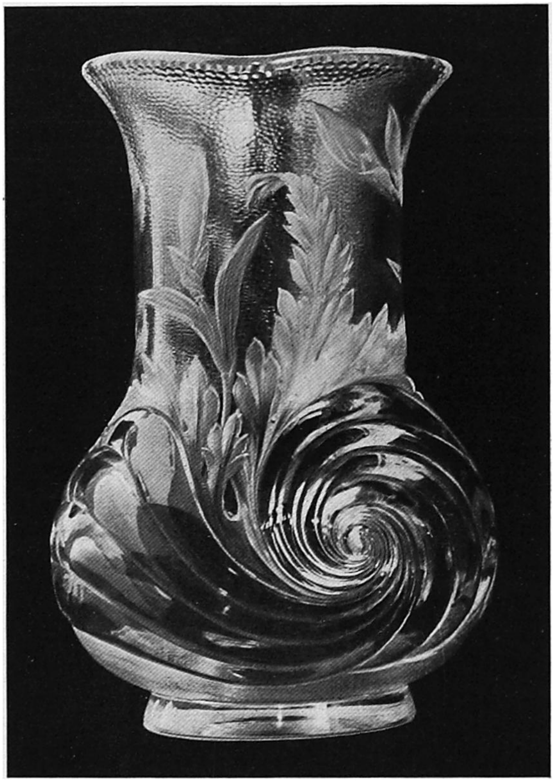
If the finished piece is to be what is popularly known as "cut-glass" the main outlines of the geometrical pattern are marked on the plain, smooth surface with a peculiar red fluid and the design is next roughed in with iron wheels or discs which are kept moist with sand and water. From this point the piece passes on from one workman to another who will in turn carry on the process to completition, using wheels of various sizes and materials as may be required.

Engraved glass differs from cut in design and the kind of discs used in cutting rather than in the process. It is termed "Rock Crystal" because the results resemble the ancient cutting, practiced by the Romans, on gems and crystals, and is costly on account of the unusual amount of labor expended upon it. This cutting, together with that known as carved or sculptured glass, because of its resemblance to the deeper



EXCEPTIONAL BRILLIANT CUTTING—AMERICAN

intaglio cutting, is produced by the use of copper discs which vary in diameter from that of a pin head to six inches, and are as thin as a hair, or they may be a quarter of an inch thick. In this method greater latitude is possible in design and the engraver may model and develop the pattern as he goes along, producing artistic expression in freely playing ornament, figures, flowers, etc.



INTAGLIO CUTTING—FRENCH

With the cutting done, then comes the polishing, for the piece is yet in a rough state and must be smoothed down. In "cut" glass complete polishing and extreme brilliancy are required, while in the rock crystal and carved glass perhaps only a part is to be polished, the remaining parts being left matt. Polishing is accomplished by means of wooden and cork wheels with pumice and putty powder, and often felt wheels are used on flat surfaces. Occasionally where the roughness cannot be removed by polishing without melting away sharp outlines hydrofluoric acid is used.

And here we will point our last lesson: On cheap glass acid polishing is used to excess to save the cost of the more laborious but better method. Fortunately, however, this cheapening is easily discerned by the wavy appearance of the surface and the peculiar sheen of the glass. Moreover, glass so finished quickly becomes clouded when exposed to the air, and requires frequent cleaning.

Our object is now accomplished, for we have told our readers a little of the history of glass, shown what modern cut-glass is, of what it is made and how it is cut, and finally, we hope, have helped them to distinguish between the good and the inferior and to better appreciate the beautiful examples found in our high-class shops.

It must not be supposed that all the fine glass is made in America, for England and France both produce superb work, each in their own way, as the specimens which illustrate this article will show.

HENRY P. TILDEN.

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RULES GOVERNING THE COPYING OF PICTURES

The enterprise of the Metropolitan Museum in removing the restrictions on sketching and copying in the institution excited no little comment at the time the announcement was made, and not a few doubted the wisdom of the new policy. The liberal action of the trustees in permitting copying from the collections without restrictions of any kind, was taken after careful consideration of the usages of other museums, especially those of Europe. The result of the investigation is not without general interest, and the following note has been prepared from the replies received in answer to a circular letter sent to all of the important museums. The questions asked were: Is copying allowed? What pictures may be copied? Is there a restriction with regard to signature? Is there a restriction with regard to size? Are copies marked?

Replies were received from the following: The National Gallery, Wallace Collection (Hertford House), National Gallery of British Art, and Sir John Soane's Museum of London; the City of Birmingham Museum and Art Gallery; the Walker Art Gallery of Liverpool; Musee Nationale du Luxembourg, of Paris; The Royal Galleries of Italy (all of the Royal galleries and museums of Italy are governed by the same regulations); Museo Civico Correr, Galleria del Palazzo Ducale, of Venice; Museo Nazionale Scavi di Pompeii, of Naples; the Hermitage and the Imperial Museum of Alexander III., of St. Petersburg; Kunsthistorisches Hof-Museum, of Vienna; Nacional de Pintura y Escultura del Prado, Madrid; Ryks-Museum of Amsterdam; Royal Museum of Berlin; and the Konigliche Germalde-Galerie, of Dresden.

Permission to copy is given in all museums except the Wallace Collection, of London, where the arrangement of the furniture and the works of art, with the pictures, is such that it is impossible to grant facilities for this kind of work without impeding the public. It is, however, permitted to sketch with a note-book. Most museums allow all